

3. (New) A head end comprising:

at least one modem for communicating with service units over a transmission bandwidth, the transmission bandwidth being divided into a number of subbands, each subband including a plurality of payload channels and at least one control channel; and
a control circuit, communicatively coupled with the at least one modem, that assigns each service unit to a subband such that the load of the service units is substantially evenly distributed over the subbands.

4. (New) The head end of claim 3, wherein the control circuit selectively assigns each service unit based on at least an expected load on a control channel in a subband.

5. (New) The head end of claim 3, wherein the control circuit selectively assigns each service unit based on at least an expected load for the service units.

6. (New) The head end of claim 3, wherein the control circuit is further operable to allocate a payload channel to a service unit in response to a request for bandwidth for the service unit.

7. (New) The head end of claim 3, wherein the control circuit is operable to assign a number of service units to each subband for selective use of the payload channels in the subband by the service units so as to increase the number of service units that can be coupled to a communication system.

8. (New) A head end comprising:

at least one modem for communicating with service units over a transmission bandwidth, the transmission bandwidth being divided into a number of subbands, each subband including a plurality of payload channels and at least one control channel;
a control circuit, communicatively coupled with the at least one modem, that assigns each service unit to a subband such that the service units are substantially evenly distributed over the subbands; and

wherein each subband includes a number of payload channels that transmit data at a first rate and a control channel that transmits data at a second rate, the second rate being slower than the first rate.

9. (New) The head end of claim 8, wherein the control circuit selectively assigns each service unit based on at least an expected load on a control channel in a subband.

10. (New) The head end of claim 8, wherein the control circuit selectively assigns each service unit based on at least an expected load for the service units.

11. (New) The head end of claim 8, wherein the control circuit is further operable to allocate a payload channel to a service unit in response to a request for bandwidth for the service unit.

12. (New) The head end of claim 8, wherein the control circuit is operable to assign a number of service units to each subband for selective use of the payload channels in the subband by the service units so as to increase the number of service units that can be coupled to a communication system.

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